

CLAIMS

1. A portable computer display device including one or more mating sections for docking with similar portable computer display devices, said display device comprising:

a computer display with associated supporting cabinet structure;

said associated supporting cabinet structure having one or more exterior sides where one or more corresponding edges of said display are exposed;

at least one electrical connector disposed within said associated supporting cabinet structure and proximate to said one or more exterior sides, said at least one electrical connector capable of connecting in a mating relationship with a corresponding electrical connector in said similar portable display device

wherein said one or more exposed display edges substantially abut a corresponding exposed display edge of said second similar portable device when said electrical connectors are connected.

2. A portable computer display device including one or more mating sections for docking with similar portable computer display devices, as per claim 1, wherein said computer display is logically re-mapped when connected to said second similar portable computer display device to be part of a single display comprising the displays of both devices.

1 3. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 1, wherein said portable computer
3 display device shares processing power when connected to said similar portable computer
4 display device.

1 4. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 1, wherein said one or more exterior
3 sides comprises two exterior edges.

1 5. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 4, wherein said display is
3 substantially rectangular in shape and a first one of said two exterior sides extends along a
4 length of said display while a second one of said two exterior edges extends along a width
5 of said display.

1 6. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 5, wherein said portable display
3 device is connected to said similar portable display device along said first one of said two
4 exterior sides providing a portrait orientation display.

1 7. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 5, wherein said portable display
3 device is connected to said similar portable display device along said second one of said two
4 exterior sides providing a landscape orientation display.

1 8. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 1, wherein said one or more exposed
3 display edges are exposed by removing said one or more exterior sides which protect said
4 one or more exposed display edges.

1 9. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 1, wherein said one or more exposed
3 display edges are exposed by folding said one or more exterior sides which protect said one
4 or more exposed display edges towards a back surface of said supporting cabinet.

1 10. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 9, wherein said one or more exterior
3 sides are connected to said supporting cabinet structure via one or more hinges.

1 11. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 1, wherein data processed by said
3 connected devices is synchronized prior to disconnection of said devices.

1 12. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 1, wherein said device further
3 comprises one or more structural connectors for structurally mating said device to said
4 similar device.

1 13. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 1, wherein said device abuts in a
3 substantially coplanar configuration.

1 14. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, said device comprising:

4 a housing having a top surface enclosing said display, a bottom support surface and
5 a plurality of side surfaces connecting said top surface and said bottom support surface;

6 said plurality of said side surfaces comprising one or more fixed surfaces and one or
7 more movable surfaces, and

8 wherein when said movable surfaces are moved, said device is receptive to being
9 mated to said similar device so as to form said single display.

1 15. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 14, wherein when said device
4 receives said similar device the displays of said devices are logically re-mapped to provide
5 said single display for said devices.

1 16. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 14, wherein said display is logically
4 re-mapped when connected to said second similar portable computer display device to be
5 part of a single display comprising the displays of both devices.

1 17. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 14, wherein said one or more
4 movable surfaces comprises two movable surfaces.

1 18. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 17, wherein said display is
4 substantially rectangular in shape and a first one of said movable surfaces extends along a
5 length of said display while a second one of said two movable surfaces extends along a
6 width of said display.

1 19. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 18, wherein said portable display
4 device is connected to said similar portable display device along said first one of said two
5 movable surfaces providing a portrait orientation display.

1 20. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 18, wherein said portable display
4 device is connected to said similar portable display device along said second one of said two
5 movable surfaces providing a landscape orientation display.

1 21. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 14, wherein said one or more
4 movable surfaces are removable.

1 22. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 14, wherein said one or more
4 movable surfaces are foldable towards said back support surface.

1 23. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 22, wherein said one or more foldable
4 surfaces are connected to said housing via one or more hinges.

1 24. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 functionally form a single display surface, as per claim 14, wherein said device synchronizes
4 data processed by said mated devices prior to disconnection of said devices.

1 25. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, said display device comprising:

3 a computer display with associated supporting cabinet structure having a display
4 surface;

5 said associated supporting cabinet structure having an exterior side where a
6 corresponding edge of said display is exposed;

7 at least one electrical connector disposed on said housing along said exterior side;

8 at least one mating element disposed on said housing along said exterior side;

9 wherein said electrical connector and mating element are disposed such that when
10 said device is docked with a second similar portable display device via a mating electrical connector
11 and a mating element disposed along a side of said second device having a corresponding exposed
12 display edge, said display edges are substantially contiguous and the display surfaces of said devices
13 are substantially coplanar.

1 26. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 25, wherein the displays of said
3 connected devices are logically re-mapped to provide a single display for said connected
4 devices.

1 27. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 25, wherein said portable computer
3 display device shares processing power when docked with said similar portable computer
4 display device.

1 28. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 25, wherein said display is
3 substantially rectangular in shape said exterior side extends along a longer edge of said
4 display such that when said portable display device is connected to said similar portable
5 display device the displays provide a portrait orientation.

1 29. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 25, wherein said display is
3 substantially rectangular in shape and said exterior side extends along a shorter edge of said
4 display such that when said portable display device is connected to said similar portable
5 display device the displays provide a landscape orientation.

1 30. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 25, wherein said exposed display
3 edge is exposed by removing a supporting cabinet section which extends along said display
4 edge.

1 31. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 25, wherein said exposed display
3 edge is exposed by folding a supporting cabinet section which extends along said display
4 edge towards a back surface of said supporting cabinet.

1 32. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 31, wherein said folding cabinet
3 section is attached to said support cabinet via one or more hinges.

1 33. A portable computer display device including one or more mating sections for docking with
2 similar portable computer display devices, as per claim 25, wherein said portable computer
3 display device synchronizes data processed by said connected devices prior to disconnection
4 of said devices.

1 34. A portable computer display device capable of sharing hardware with similar portable
2 computer display devices by docking with said similar devices, said display device
3 comprising:

4 a computer display with associated supporting cabinet structure;

5 said associated supporting cabinet structure comprising one or more movable
6 sections, said one or more movable sections located on one or more corresponding exterior edges
7 of said associated supporting cabinet structure;

8 electrical and structural connectors disposed on said portable computer display device
9 and located within an area encapsulated by each of said one or more movable sections, and

10 wherein when said one or more movable sections are moved so as to expose said
11 electrical and structural connectors and said device is receptive to docking via said electrical and
12 structural connectors to a similarly configured portable computer display device to form a single
13 display.

1 35. A portable computer display device capable of sharing hardware with similar portable
2 computer display devices by docking with said similar devices, as per claim 34, wherein said
3 display is logically re-mapped when connected to said similarly configured portable device
4 to provide a single desktop display for said connected devices.

1 36. A portable computer display device capable of sharing hardware with similar portable
2 computer display devices by docking with said similar devices, as per claim 34, wherein said
3 portable computer display device shares processing power when connected to said similarly
4 configured portable device.

1 37. A portable computer display device capable of sharing hardware with similar portable
2 computer display devices by docking with said similar devices, as per claim 34, wherein said
3 combined single display has a portrait orientation.

1 38. A portable computer display device capable of sharing hardware with similar portable
2 computer display devices by docking with said similar devices, as per claim 34, wherein said
3 combined single display has a landscape orientation.

1 39. A portable computer display device capable of sharing hardware with similar portable
2 computer display devices by docking with said similar devices, as per claim 34, wherein said
3 movable sections are removable from said device.

1 40. A portable computer display device capable of sharing hardware with similar portable
2 computer display devices by docking with said similar devices, as per claim 34, said movable
3 sections are foldable towards a back surface of said supporting cabinet structure.

- 1
- 2
- 3

- 1
- 2
- 3
- 4

1 43. A portable computing device including a display having a display surface, said device
2 capable of being mated with a similar device such that the display surfaces of each device
3 form a single display surface, said device comprising:

4 a housing having a back surface and at least first, second, and third exterior edges
5 enclosing said display such that said display surface is exposed for viewing;

6 said first housing edge extending along a first edge of said display, a first end of said
7 first housing edge adjoining a portion of said second housing edge extending beyond a second edge
8 of said display, said first housing edge being foldable towards said back surface to expose said first
9 display edge;

10 said portion of said second edge extending beyond said second edge of said display
11 having a specified geometric shape when said first housing edge is folded towards said back surface;

12 said third edge including a reciprocal mating section at an end of said third edge
13 adjoining a second end of said first housing edge opposite said first end, said reciprocal mating
14 section having a geometric shape substantially identical to said specified geometric shape;

15 wherein when said first edge is folded towards said back surface, said portable device
16 is capable of being mated with a second similar portable device utilizing said portion of said second
17 edge extending beyond said second edge of said display and said reciprocal mating section such that
18 said first display edge is adjacent an exposed display edge of said second similar portable device.